

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION  
**FINAL AS-BUILT PLANS**  
~~CONTRACT PLANS~~

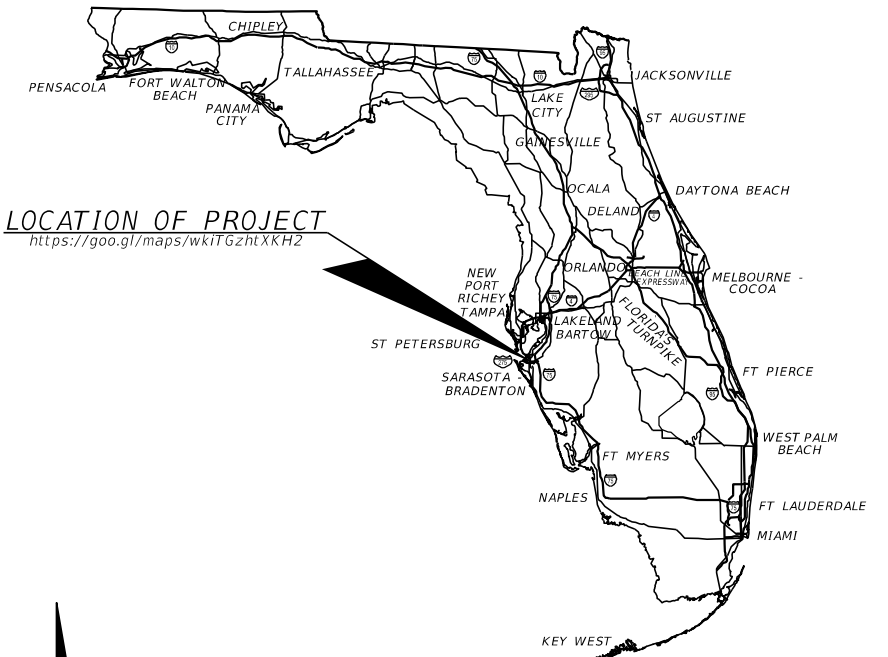
INDEX OF LIGHTING PLANS

SHEET NO.	SHEET DESCRIPTION
L-1	KEY SHEET
L-2	SIGNATURE SHEET
L-3	TABULATION OF QUANTITIES
L-4	GENERAL NOTES
L-5	POLE DATA & LEGEND SHEET
L-6 - L-13	LIGHTING PLAN
L-14	SERVICE CENTER DETAILS LOAD CENTER
L-15	SERVICE POINT GENERAL NOTES
L-16	LOAD CENTER SCHEDULES
L-17	LIGHT POLE SPREAD FOOTING

FINANCIAL PROJECT ID 438062-1-52-01  
MANATEE COUNTY (13020)  
STATE ROAD NO. 43

LIGHTING PLANS

LOCATION OF PROJECT  
<https://goo.gl/maps/wkitGzhtXKH2>



**COMPONENT INDEX**

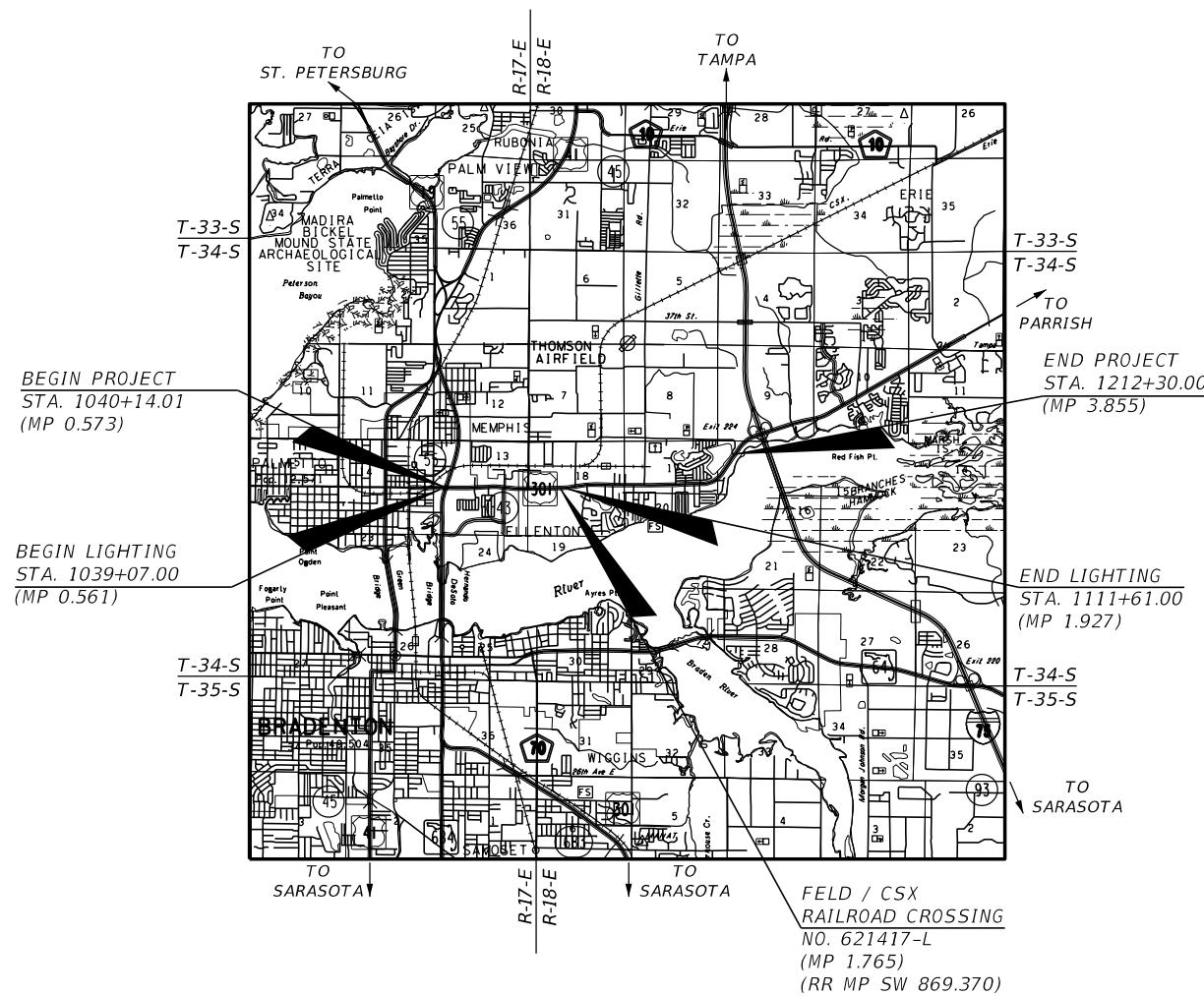
KEY SHEET	1
SIGNATURE SHEET	L-2A

**SUBMITTALS**

CONTRACTOR AS-BUILTS	EDMS # 1324771
BORE PATH REPORTS	EDMS # 1324770

**REVISIONS**

1	KEY SHEET
L-3	TABULATION OF QUANTITIES



NAME OF CONTRACTOR SUPERIOR ASPHALT, INC.  
NAME OF ALL CONSULTANTS INVOLVED IN-HOUSE PROJECT  
DISTRICT SECRETARY L.K. NANDAM, P.E.  
RESIDENT ENGINEER TRISHA HARTZELL, P.E.  
PROJECT MANAGER GREGORY FALCONE  
PROJECT ADMINISTRATOR ROBERT HILL  
DATE WORK STARTED 09/15/2019  
DATE OF FINAL ACCEPTANCE 12/14/2020

**LIGHTING PLANS  
ENGINEER OF RECORD:**

PATRICIA T. CHRISTIE, P.E.  
P.E. NO.: 60049  
FALLER, DAVIS & ASSOCIATES, INC.  
4200 W. CYPRESS ST., SUITE 500  
TAMPA, FLORIDA 33607-4168  
(813) 261-5136  
CONTRACT NO. C9P43  
VENDOR NO. F592594956001  
CERTIFICATE OF AUTHORIZATION NO. 5864

**FDOT PROJECT MANAGER:**

FIDEL E. VARGAS, P.E.

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
E1R79	19	L-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

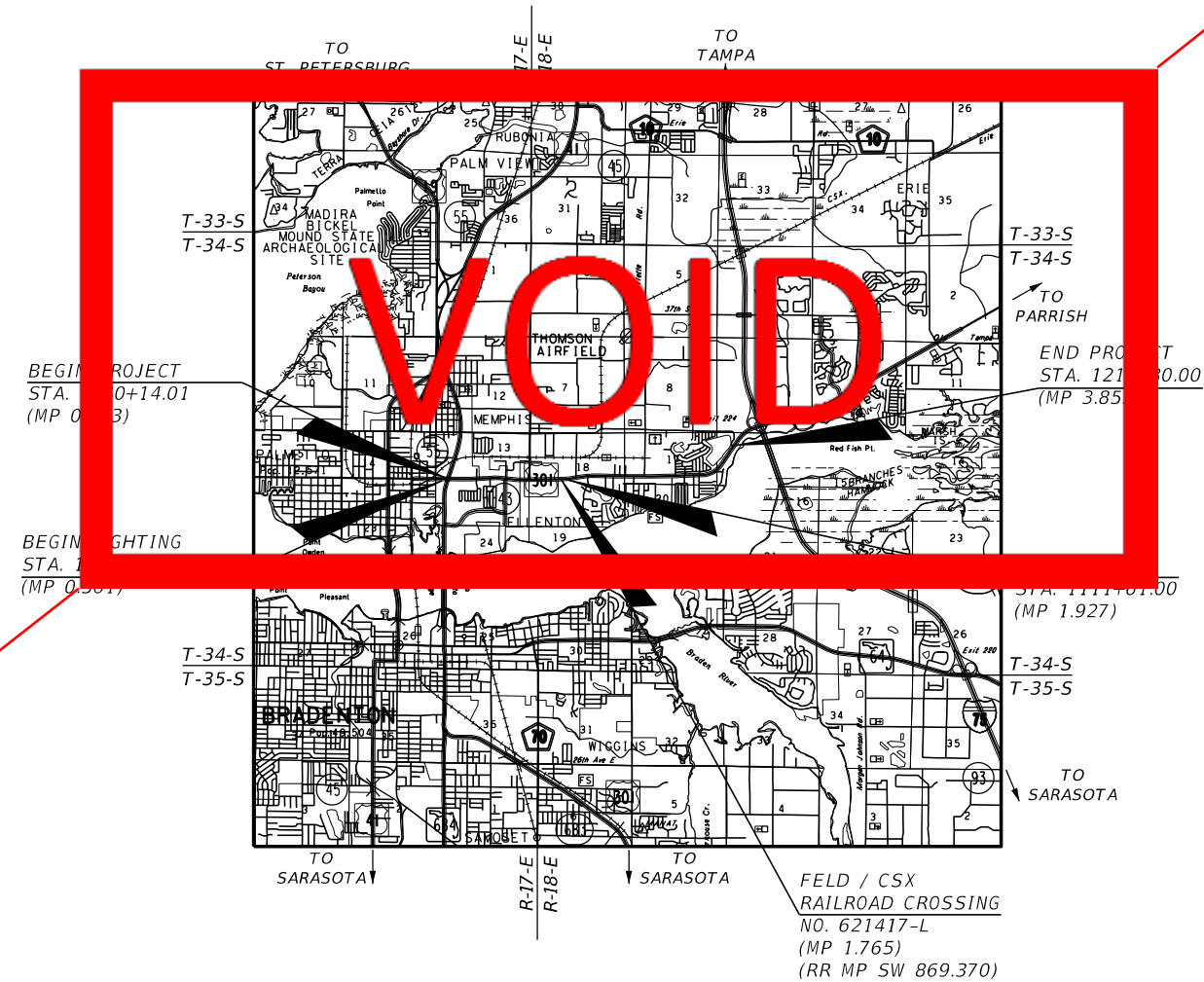
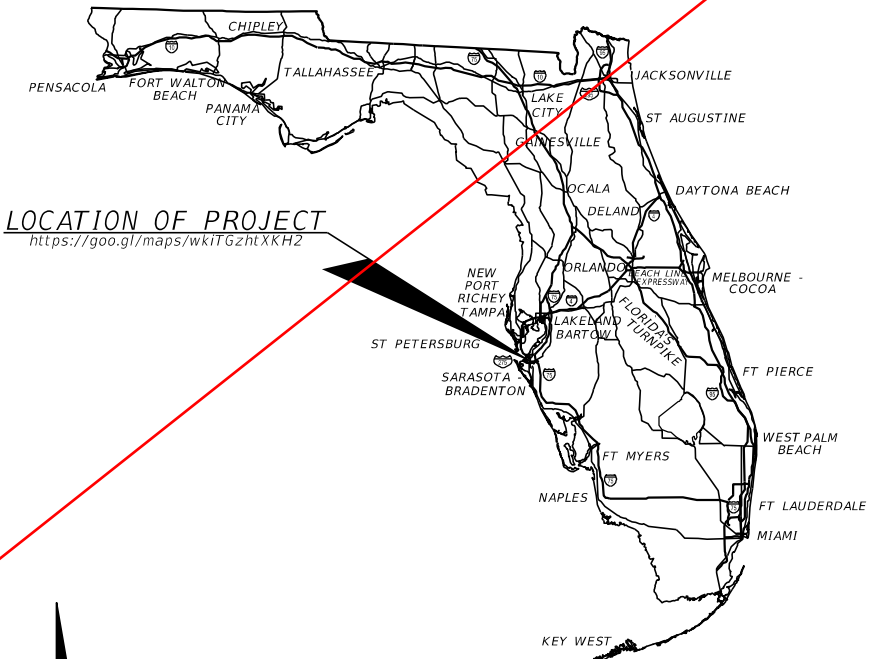
FINANCIAL PROJECT ID 438062-1-52-01  
MANATEE COUNTY (13020)  
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LIGHTING PLANS

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L-17	LIGHT POLE SPREAD FOOTING

LOCATION OF PROJECT  
<https://goo.gl/maps/wkitGzhtXKH2>



**LIGHTING PLANS  
ENGINEER OF RECORD:**

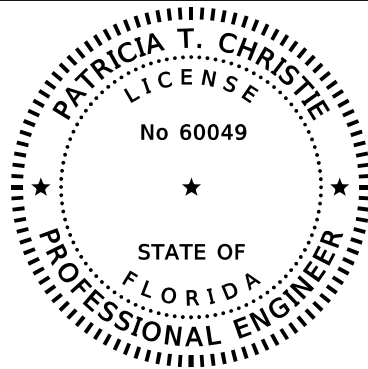
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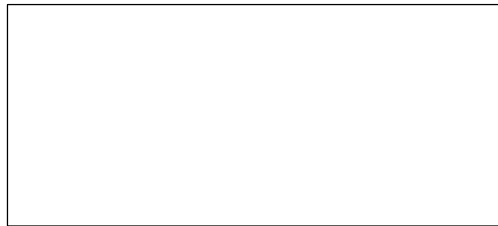
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ON THE DATE ADJACENT TO THE SEAL

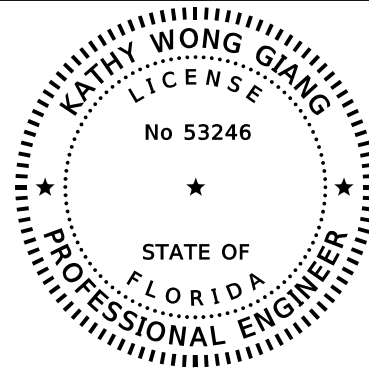
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FALLER, DAVIS & ASSOCIATES, INC  
4200 W. CYPRESS ST., SUITE 500  
TAMPA, FLORIDA 33607-4168  
CERTIFICATE OF AUTHORIZATION NO.: 5864  
PATRICIA T. CHRISTIE, P.E. NO.: 60049

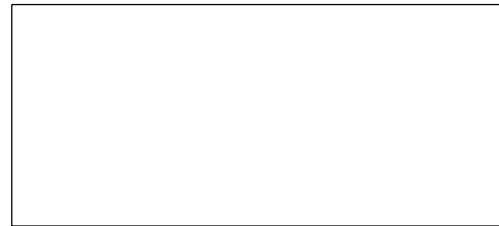
THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE  
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

LIGHTING PLANS

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
L-1	KEY SHEET
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L-6 - L-13	LIGHTING PLAN



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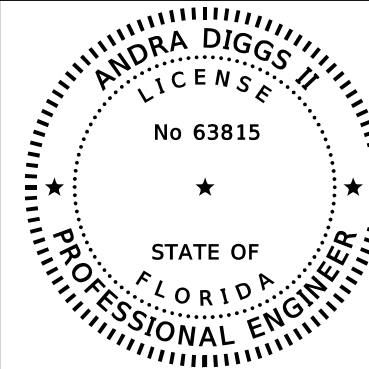
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KNK ENGINEERING CONSULTING CORP.  
7380 W. SAND LAKE RD., SUITE 500  
ORLANDO, FLORIDA 32819  
CERTIFICATE OF AUTHORIZATION # 28506  
KATHY WONG GIANG P.E.: 53246

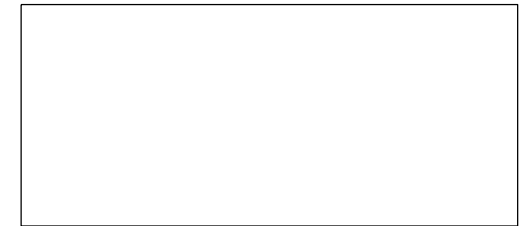
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LIGHTING PLANS

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
L-2	SIGNATURE SHEET
L-14	SERVICE CENTER DETAILS LOAD CENTER
L-15	SERVICE POINT GENERAL NOTES
L-16	LOAD CENTER SCHEDULES



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ON THE DATE ADJACENT TO THE SEAL

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FLORIDA DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE MATERIALS OFFICE  
801 N. BROADWAY AVENUE  
BARTOW, FLORIDA 33830-3809  
ANDRA DIGGS II, P.E. NO.: 63815

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE  
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

LIGHTING PLANS

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
L-2	SIGNATURE SHEET
L-17	LIGHT POLE SPREAD FOOTING

REVISIONS				FALLER, DAVIS & ACCOCIATES, INC. 4200 W. CYPRESS ST. SUITE 500 TAMPA, FLORIDA 33607-1707 CERTIFICATE OF AUTHORIZATION NO. 5864 PATRICIA T. CHRISTIE, P.E. NO.: 60049	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.  L-2
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					SR 43	MANATEE	438062-1-52-01	

**SIGNATURE SHEET**

STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY  
ON THE DATE INDICATED HERE

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COPIES.

Date	Name	Position (Title)	Review Type, If Applicable
<b>RESIDENT OFFICE</b>			
<b>DISTRICT OFFICE</b>			

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	FINAL "AS-BUILT" SIGNATURE SHEET	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																				GRAND TOTAL	
			L-6		L-7		L-8		L-9		L-10		L-11		L-12		L-13		PLAN	FINAL				
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL						
630-2-11	CONDUIT (F&I) (OPEN TRENCH)	LF	283		533		424		528		338		383		150		185				2824	✓		
630-2-12	CONDUIT (F&I) (DIRECTIONAL BORE)	LF	47		65				72		267		77		185						713	375		
635-2-11	PULL AND SPLICE BOX (F&I) (13"X24")	EA	7		4		8		2		2		4		4						40	✓		
639-1-122	ELECTRICAL POWER SERVICE (F&I) (UNDERGROUND) (METER PURCHASED BY CONTRACTOR FROM POWER COMPANY)	AS															1				1	✓		
641-2-12	PRESTRESSED CONCRETE POLE (F&I) (TYPE P-II SERVICE POLE)	EA															1				1	✓		
715-1-12	LIGHTING - CONDUCTORS (F&I) (NO.8 TO NO.6)	LF	1506		1388		2018		1264		1290		1048		814		1480				10808	✓		
715-1-12	LIGHTING - CONDUCTORS (F&I) (NO.8 TO NO.6)(GREEN)	LF	753		694		1009		632		645		524		407		740				5404	✓		
715-4-13	LIGHT POLE COMPLETE (F&I) (STANDARD POLE) (STANDARD FOUNDATION) (40')	EA	3		2		4								1		3				13	✓		
715-4-23	LIGHT POLE COMPLETE (F&I) (STANDARD POLE) (SPECIAL FOUNDATION) (40')	EA															2				2	✓		
715-7-11	LOAD CENTER (F&I) (SECONDARY VOLTAGE)	EA															1				1	✓		
715-7-21	LOAD CENTER (REWORK) (SECONDARY VOLTAGE)	EA			1						1										2	✓		
715-11-211	LUMINAIRE (F&I) (REPLACE EXISTING LUMINAIRE ON EXISTING POLE/ARM) (ROADWAY) (COBRA HEAD)	EA	5		6																11	✓		
715-11-213	LUMINAIRE (F&I) (REPLACE EXISTING LUMINAIRE ON EXISTING POLE/ARM) (ROADWAY) (POLE TOP)	EA					1								2						3	✓		
715-500-1	LIGHT POLE CABLE DISTRIBUTION SYSTEM (CONVENTIONAL)	EA	3		2		4								1		5				15	✓		

EDMS # 1324770

REVISIONS DATE DESCRIPTION DATE DESCRIPTION				FALLER, DAVIS & ACCOCIATES, INC. 4200 W. CYPRESS ST. SUITE 500 TAMPA, FLORIDA 33607-1707 CERTIFICATE OF AUTHORIZATION NO. 5864 PATRICIA T. CHRISTIE, P.E. NO.: 60049	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TABULATION OF QUANTITIES	SHEET NO. L-3
ROAD NO.		COUNTY			FINANCIAL PROJECT ID				
SR 43		MANATEE			438062-1-52-01				

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NOTES:

1. PROPOSED LIGHT POLES AT FELD WAY WILL BE MAINTAINED BY MANATEE COUNTY. ALL OTHER PROPOSED LIGHTING SYSTEMS WILL BE MAINTAINED BY THE CITY OF PALMETTO.
2. CONDUIT (DIRECTIONAL BORE): USE HDPE FOR CONDUITS INSTALLED WITH THE DIRECTIONAL BORE METHOD.
3. CAP ALL SPARE CONDUITS AT PAVEMENT CROSSINGS AT BOTH ENDS AND DIRECT TO THE NEAREST LIGHTING PULLBOX.
4. THE LOCATION OF THE POLES, CONDUCTORS, CONDUITS, JUNCTION BOXES AND SERVICE POLES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE ENGINEER TO ACCOMMODATE LOCAL CONDITIONS AND EXISTING UTILITY LOCATIONS.
5. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE WITHIN 2' OF THE LIGHTING POLE FOUNDATIONS OR CONDUIT RUN, HAND DIG THE FIRST 4' OF THE HOLE FOR THE POLE FOUNDATION AND CONDUIT RUN.
6. PAY ITEM 715-7-21 TO INCLUDE ALL WORK NECESSARY TO CONNECT NEW LIGHT POLES TO EXISTING LOAD CENTERS A AND B. THIS INCLUDES ALL MATERIALS NECESSARY TO GO FROM THE PROPOSED PULL BOX INTO THE EXISTING LOAD CENTER.
7. ALL EXISTING UNDERGROUND LIGHTING INFRASTRUCTURE IS TO REMAIN (PULLBOXES, CONDUIT, ETC.).
8. MEET ALL APPLICABLE OSHA REQUIREMENTS (10 FEET MINIMUM DISTANCE MAINTAINED BETWEEN THE EQUIPMENT AND THE ELECTRICAL OVERHEAD FACILITY).

REVISIONS				FALLER, DAVIS & ASSOCIATES, INC. 4200 W. CYPRESS ST. SUITE 500 TAMPA, FLORIDA 33607-1707 CERTIFICATE OF AUTHORIZATION NO. 5864 PATRICIA T. CHRISTIE, P.E. NO.: 60049	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			GENERAL NOTES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		L-4
						SR 43	MANATEE		438062-1-52-01

# LEGEND

## SYMBOLS

## DESCRIPTION



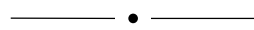
PROPOSED PULL BOX.



PROPOSED LOAD CENTER.



EXISTING LOAD CENTER.



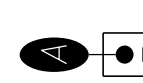
ONE - 2" SCHEDULE 40 PVC UNDERGROUND CONDUIT CONTAINING CONDUCTORS. AWG SIZES AND TOTAL CONDUCTORS CALLED OUT ON PLAN SHEETS. CALL OUT NUMBER INCLUDES ONE COPPER BOND CONDUCTOR (GREEN INSULATION) INSIDE CONDUIT WITH OTHER CONDUCTORS.



TWO - 2" DIRECTIONALLY BORED, HDPE CONDUITS CONTAINING CONDUCTORS. AWG SIZES AND TOTAL CONDUCTORS CALLED OUT ON PLAN SHEETS. CALL OUT NUMBER INCLUDES ONE COPPER BOND CONDUCTOR (GREEN INSULATION) INSIDE CONDUIT WITH OTHER CONDUCTORS. ONE CONDUIT IS A SPARE. UL LISTED CONDUIT AND TRANSITION COUPLING.



EXISTING HIGH PRESSURE SODIUM (HPS) LUMINAIRE TO REMAIN.



296 WATT LIGHTING EMITTING DIODE (LED) LUMINAIRE. B4-U0-G5, TYPE IV FORWARD THROW DISTRIBUTION (ANALYZED USING HOLOPHANE PHOTOMETRIC FILE NO. MGLED\_7\_3K\_AX\_F\_L\_X\_X\_US.IES AT 32,872 LUMENS), LUMINAIRE INCLUDES INTEGRAL 1050 mA DRIVER WIRED FOR 480 VOLT OPERATION. MOUNTING HEIGHT 40'. SYMBOL INCLUDES LUMINAIRE WITH LAMP, POLE, 10' ARM, STANDARD FOUNDATION, PULL BOX AND PCDS. (SHOULDER MOUNTED)



296 WATT LIGHTING EMITTING DIODE (LED) LUMINAIRE. B4-U0-G5, TYPE IV FORWARD THROW DISTRIBUTION (ANALYZED USING HOLOPHANE PHOTOMETRIC FILE NO. MGLED\_7\_3K\_AX\_F\_L\_X\_X\_US.IES AT 32,872 LUMENS), LUMINAIRE INCLUDES INTEGRAL 1050 mA DRIVER WIRED FOR 480 VOLT OPERATION. MOUNTING HEIGHT 40'. SYMBOL INCLUDES LUMINAIRE WITH LAMP. (COBRA HEAD MOUNTED ON ARM) (TO REPLACE EXISTING HPS FIXTURE)



296 WATT LIGHTING EMITTING DIODE (LED) LUMINAIRE. B4-U0-G5, TYPE IV FORWARD THROW DISTRIBUTION (ANALYZED USING HOLOPHANE PHOTOMETRIC FILE NO. MGLED\_7\_3K\_AX\_F\_L\_X\_X\_US.IES AT 32,872 LUMENS), LUMINAIRE INCLUDES INTEGRAL 1050 mA DRIVER WIRED FOR 480 VOLT OPERATION. MOUNTING HEIGHT 40'. SYMBOL INCLUDES LUMINAIRE WITH LAMP, POLE, FOUNDATION (SPECIAL SPREAD FOOTER), PULL BOX AND PCDS. (POLE TOP MOUNTED) (SHOULDER MOUNTED)



296 WATT LIGHTING EMITTING DIODE (LED) LUMINAIRE. B4-U0-G5, TYPE IV FORWARD THROW DISTRIBUTION (ANALYZED USING HOLOPHANE PHOTOMETRIC FILE NO. MGLED\_7\_3K\_AX\_F\_L\_X\_X\_US.IES AT 32,872 LUMENS), LUMINAIRE INCLUDES INTEGRAL 1050 mA DRIVER WIRED FOR 480 VOLT OPERATION. MOUNTING HEIGHT 40'. SYMBOL INCLUDES LUMINAIRE WITH LAMP. (POLE TOP MOUNTED) (TO REPLACE EXISTING HPS FIXTURE)



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376 WATT LIGHTING EMITTING DIODE (LED) LUMINAIRE. B4-U0-G5, TYPE IV FORWARD THROW DISTRIBUTION (ANALYZED USING HOLOPHANE PHOTOMETRIC FILE NO. MGLED\_9\_3K\_AX\_F\_L\_X\_X\_US.IES AT 42,352 LUMENS), LUMINAIRE INCLUDES INTEGRAL 1050 mA DRIVER WIRED FOR 480 VOLT OPERATION. MOUNTING HEIGHT 40'. SYMBOL INCLUDES LUMINAIRE WITH LAMP, POLE, STANDARD FOUNDATION, PULL BOX AND PCDS. (POLE TOP MOUNTED) (SHOULDER MOUNTED)

### POLE DATA

INTERSECTION	POLE NO.	CIRCUIT	STATION	OFFSET	ARM LENGTH	LUMINAIRE WATTAGE	MOUNTING HEIGHT	TILT (DEGREES)	ORIENT	PAY ITEM NUMBER
SB US 41	1	B-5	1039+49	52' RT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
	2	B-5	1039+63	93' LT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
	3	B-5	1040+79	55' RT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
	EX. 1	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	-	EXIST.	715-11-211
	EX. 2	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	-	EXIST.	715-11-211
	EX. 3	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	-	EXIST.	715-11-211
NB US 41	4	B-5	1045+82	48' RT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
	5	B-5	1046+02	72' RT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
	EX. 6	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	-	EXIST.	715-11-211
	EX. 7	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	-	EXIST.	715-11-211
	EX. 8	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	-	EXIST.	715-11-211
	EX. 9	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	-	EXIST.	715-11-211
WALMART	6	A-5	1052+99	59' LT.	POLE TOP	296	40'	5	*116 DEGREES CW	715-4-13
	7	A-5	1053+00	66' RT.	POLE TOP	296	40'	5	PERPENDICULAR TO ROAD	715-4-13
	8	NOT	USED	-	-	-	-	-	-	-
	9	A-5	1053+77	86' RT.	POLE TOP	296	40'	5	PERPENDICULAR TO ROAD	715-4-13
	10	A-5	1055+44	66' RT.	POLE TOP	376	40'	5	PERPENDICULAR TO ROAD	715-4-13
	EX. 12	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	5	EXIST.	715-11-213
HABEN	11	A-5	1075+69	55' RT.	POLE TOP	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
	EX. 13	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	5	EXIST.	715-11-213
	EX. 14	EXIST.	EXIST.	EXIST.	EXIST.	296	EXIST.	5	EXIST.	715-11-213
FELD	12	C-1	1109+86	72' RT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-23
	13	C-1	1109+99	56' LT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
	14	NOT	USED	-	-	-	-	-	-	-
	15	C-1	1110+31	72' RT.	10'	296	40'	-	*96 DEGREES CW	715-4-23
	16	C-1	1111+57	58' RT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13
17	C-1	1111+61	56' LT.	10'	296	40'	-	PERPENDICULAR TO ROAD	715-4-13	

\* ORIENTATION IS MEASURED FROM TRUE NORTH

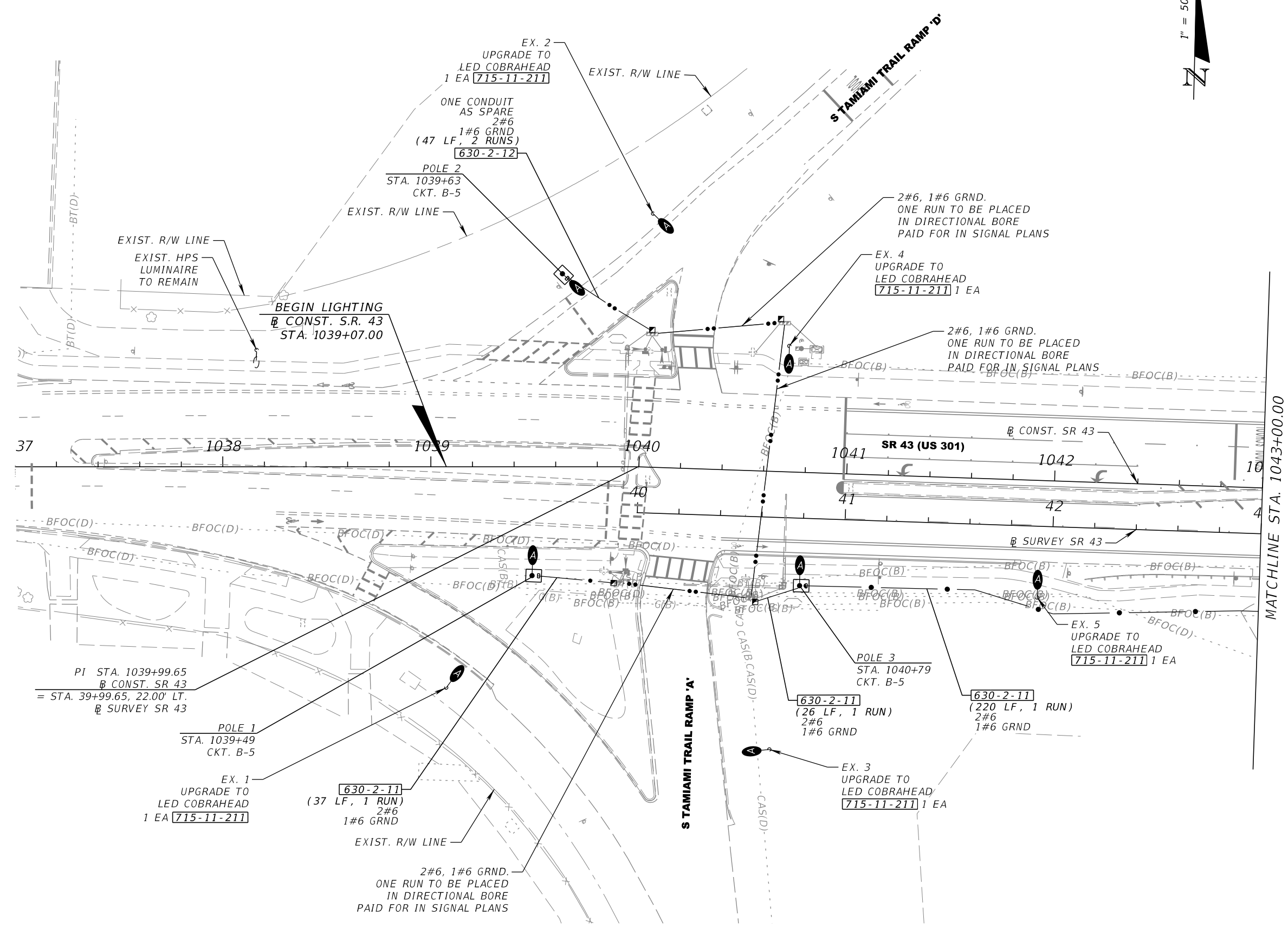
### INTERSECTION LIGHTING DESIGN CRITERIA

AVERAGE INITIAL HORIZONTAL INTENSITY 1.5 FOOT CANDLES  
 AVERAGE INITIAL VERTICAL INTENSITY 1.5 FOOT CANDLES  
 UNIFORMITY RATIO AVG./MIN. 4:1 OR LESS (1)  
 UNIFORMITY RATIO MAX./MIN. 10:1 OR LESS (1)  
 WIND SPEED 140 MPH

(1) ILLUMINATION UNIFORMITY RATIOS DO NOT APPLY TO VERTICAL FOOT CANDLES.

REVISIONS				FALLER, DAVIS & ASSOCIATES, INC. 4200 W. CYPRESS ST. SUITE 500 TAMPA, FLORIDA 33607-1707 CERTIFICATE OF AUTHORIZATION NO. 5864 PATRICIA T. CHRISTIE, P.E. NO.: 60049	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			POLE DATA & LEGEND SHEET	SHEET NO. L-5
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 43	MANATEE	438062-1-52-01		

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PI STA. 1039+99.65  
 @ CONST. SR 43  
 = STA. 39+99.65, 22.00' LT.  
 @ SURVEY SR 43

POLE 1  
 STA. 1039+49  
 CKT. B-5

EX. 1  
 UPGRADE TO  
 LED COBRAHEAD  
 [715-11-211] 1 EA

630-2-11  
 (37 LF, 1 RUN)  
 2#6  
 1#6 GRND

EXIST. R/W LINE  
 2#6, 1#6 GRND.  
 ONE RUN TO BE PLACED  
 IN DIRECTIONAL BORE  
 PAID FOR IN SIGNAL PLANS

POLE 2  
 STA. 1039+63  
 CKT. B-5

ONE CONDUIT  
 AS SPARE  
 2#6  
 1#6 GRND  
 (47 LF, 2 RUNS)  
 [630-2-12]

EX. 2  
 UPGRADE TO  
 LED COBRAHEAD  
 [715-11-211] 1 EA

POLE 3  
 STA. 1040+79  
 CKT. B-5

630-2-11  
 (26 LF, 1 RUN)  
 2#6  
 1#6 GRND

EX. 3  
 UPGRADE TO  
 LED COBRAHEAD  
 [715-11-211] 1 EA

630-2-11  
 (220 LF, 1 RUN)  
 2#6  
 1#6 GRND

2#6, 1#6 GRND.  
 ONE RUN TO BE PLACED  
 IN DIRECTIONAL BORE  
 PAID FOR IN SIGNAL PLANS

EX. 4  
 UPGRADE TO  
 LED COBRAHEAD  
 [715-11-211] 1 EA

2#6, 1#6 GRND.  
 ONE RUN TO BE PLACED  
 IN DIRECTIONAL BORE  
 PAID FOR IN SIGNAL PLANS

EX. 5  
 UPGRADE TO  
 LED COBRAHEAD  
 [715-11-211] 1 EA

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

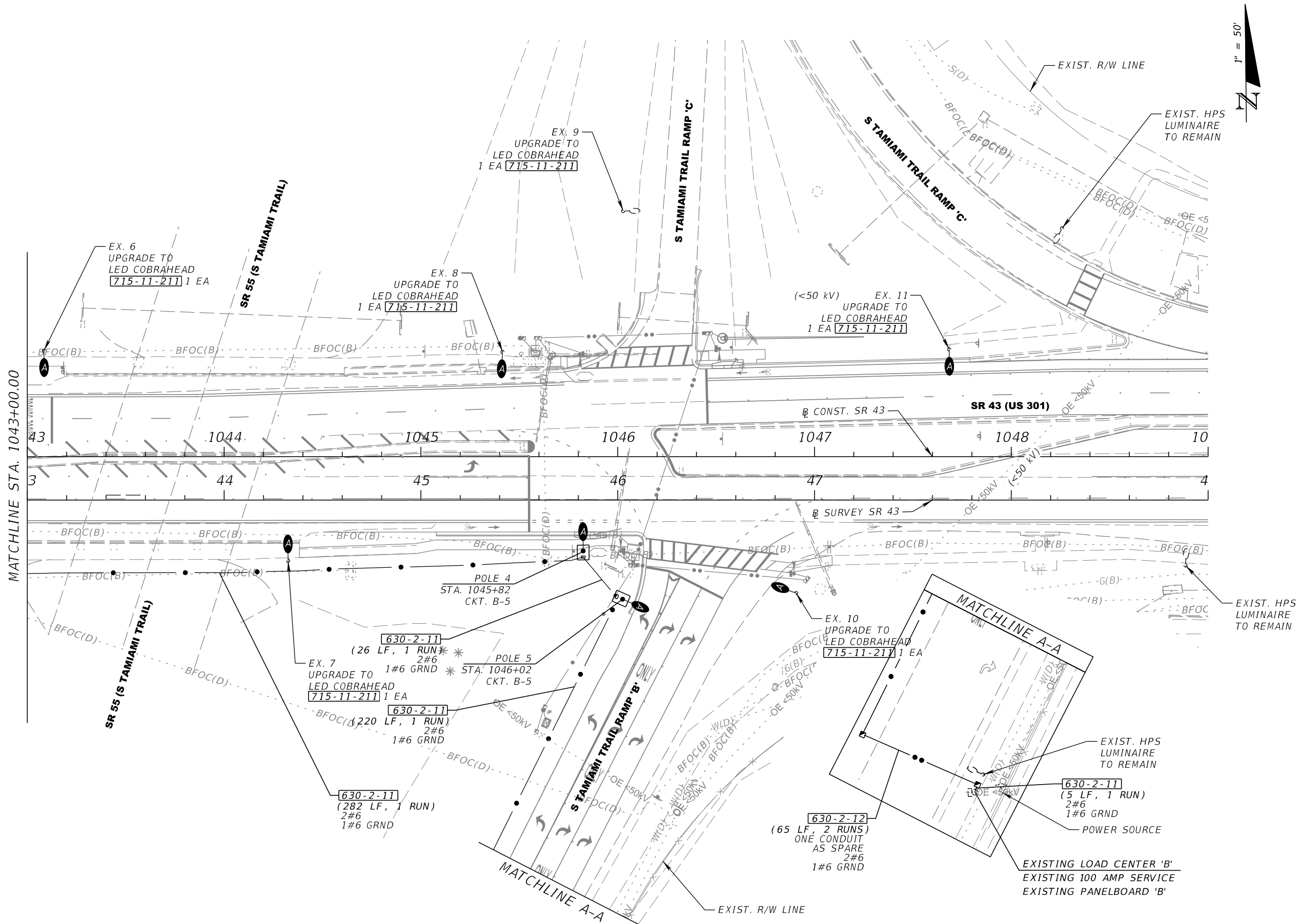
FALLER, DAVIS & ASSOCIATES, INC.  
 4200 W. CYPRESS ST. SUITE 500  
 TAMPA, FLORIDA 33607-1707  
 CERTIFICATE OF AUTHORIZATION NO. 5864  
 PATRICIA T. CHRISTIE, P.E. NO.: 60049

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 43	MANATEE	438062-1-52-01

**LIGHTING PLAN (1)**

SHEET NO.  
L-6

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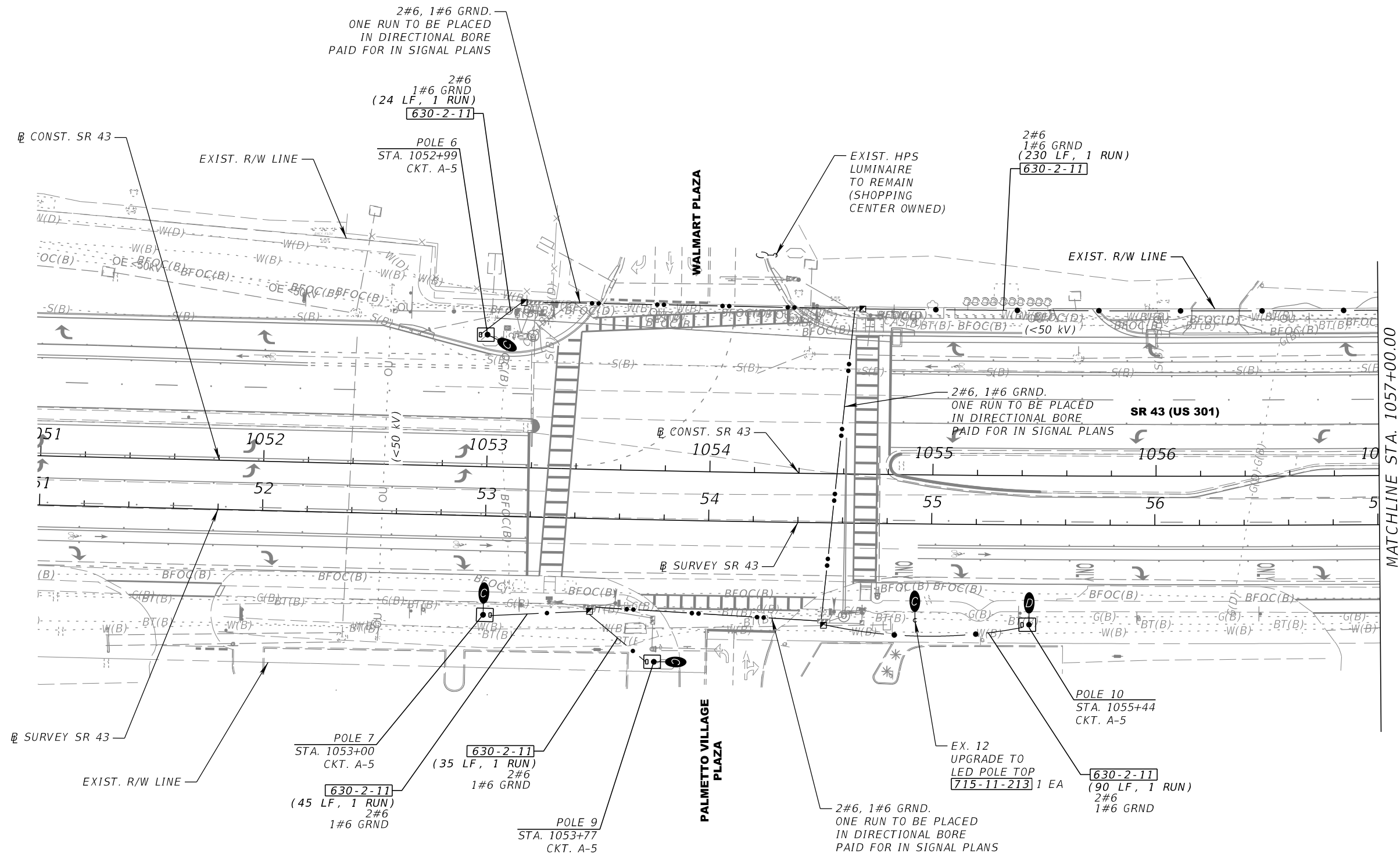
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 43	MANATEE	438062-1-52-01

**LIGHTING PLAN (2)**

SHEET NO.  
L-7

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

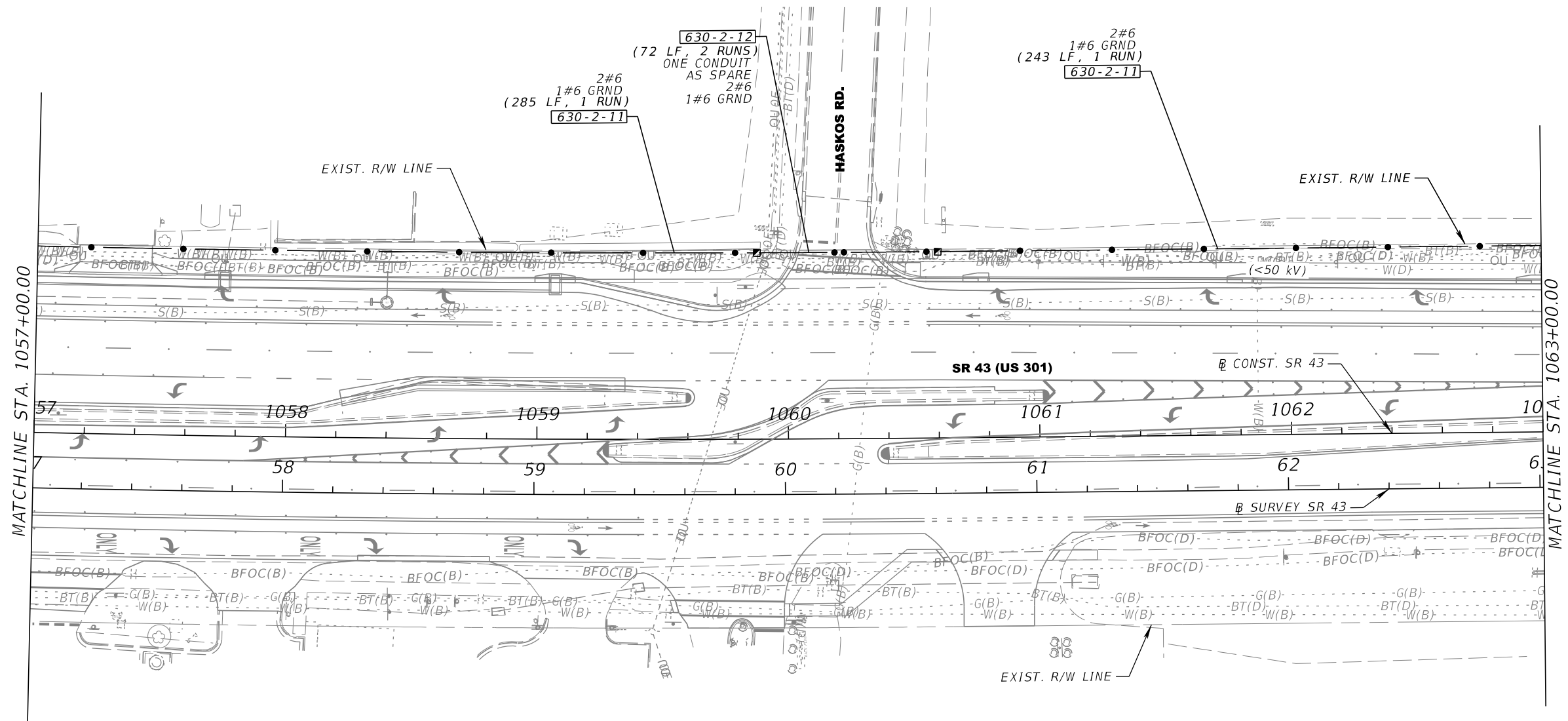
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 TAMPA, FLORIDA 33607-1707  
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 PATRICIA T. CHRISTIE, P.E. NO.: 60049

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 43	MANATEE	438062-1-52-01

**LIGHTING PLAN (3)**

SHEET NO.  
L-8

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MATCHLINE STA. 1057+00.00

MATCHLINE STA. 1063+00.00

REVISIONS			
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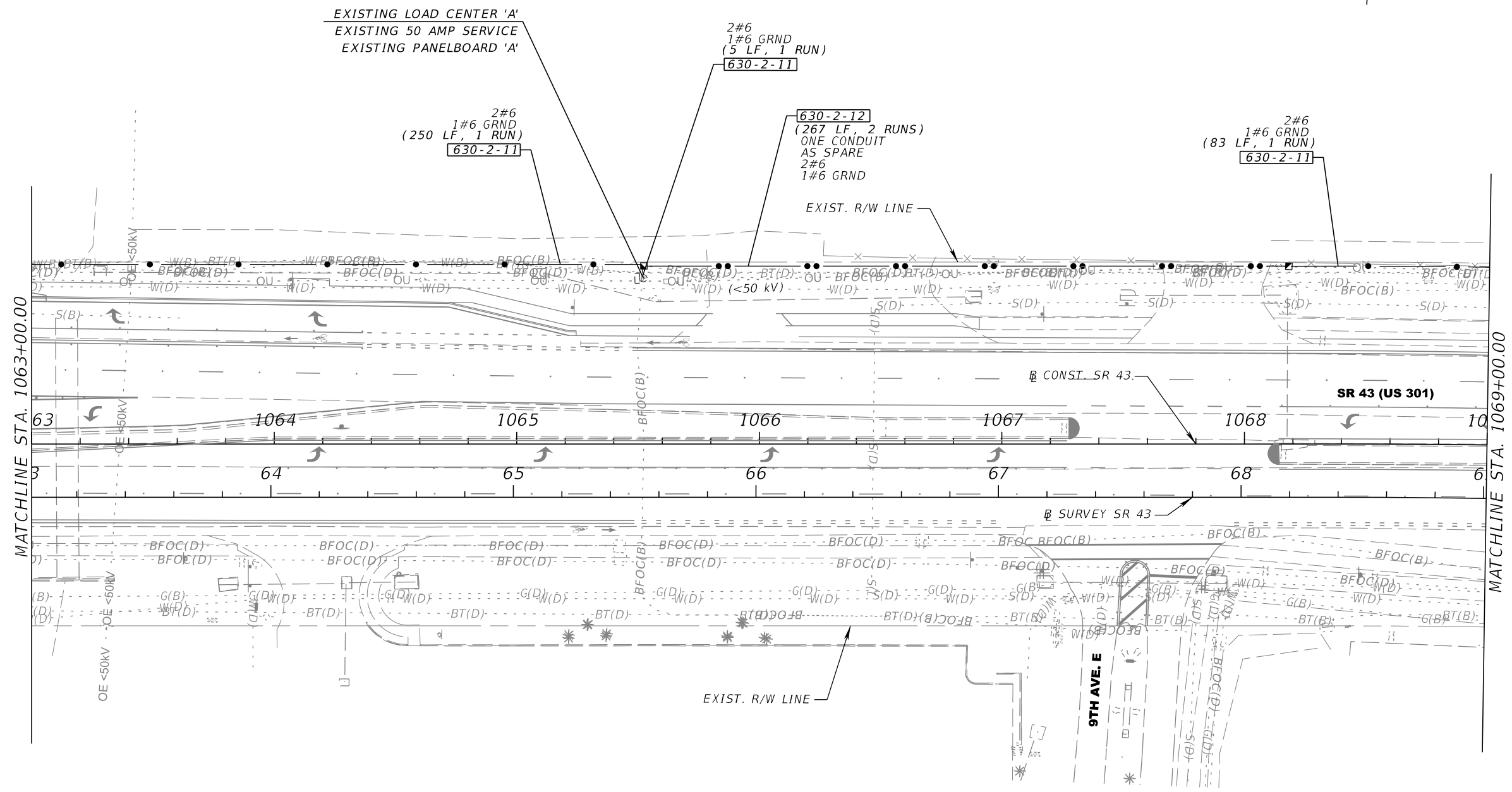
FALLER, DAVIS & ASSOCIATES, INC.  
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 TAMPA, FLORIDA 33607-1707  
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 PATRICIA T. CHRISTIE, P.E. NO.: 60049

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 43	MANATEE	438062-1-52-01

**LIGHTING PLAN (4)**

SHEET NO.  
L-9

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MATCHLINE STA. 1063+00.00

MATCHLINE STA. 1069+00.00

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

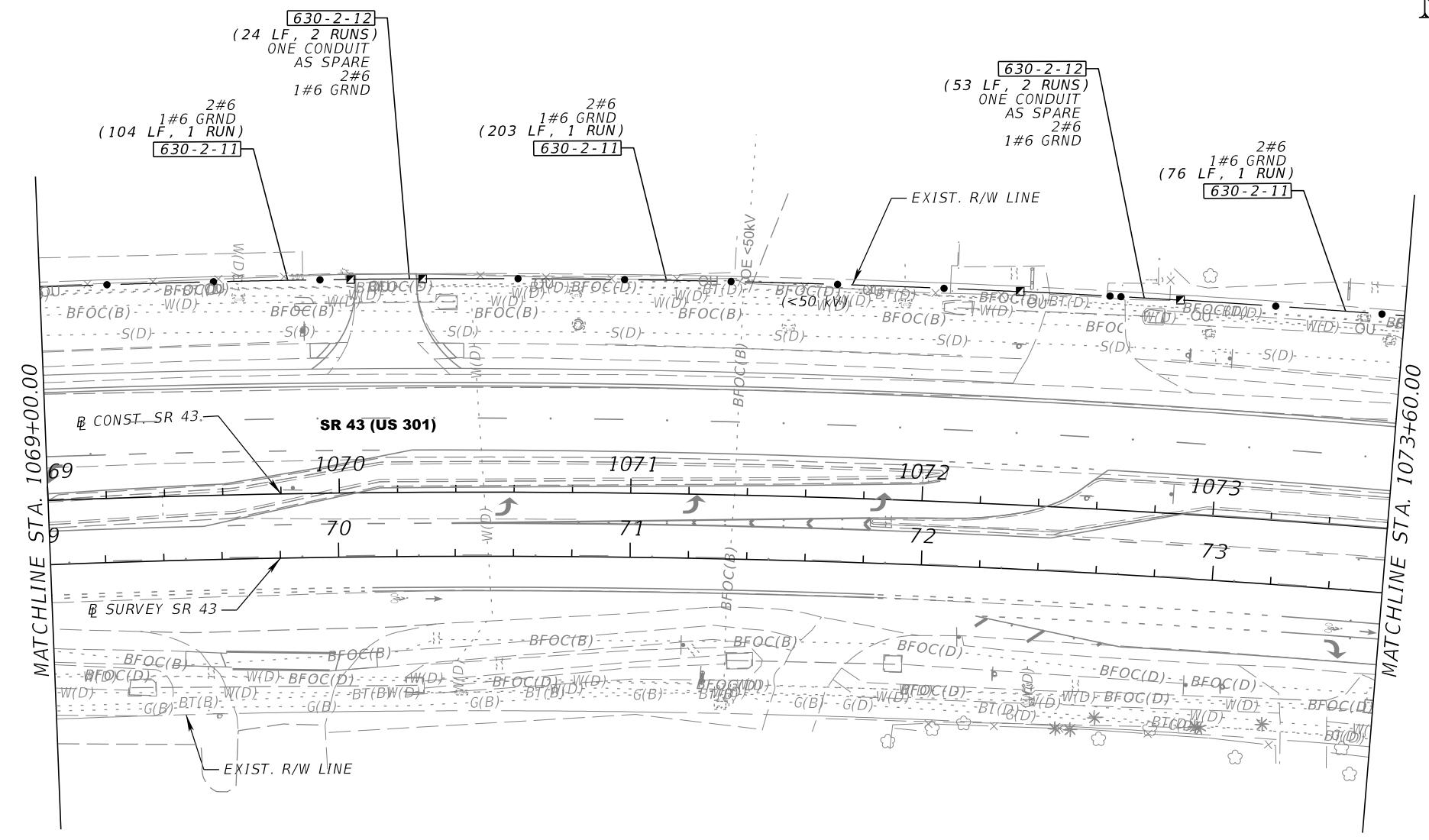
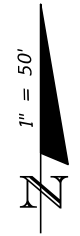
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 43	MANATEE	438062-1-52-01

**LIGHTING PLAN (5)**

SHEET NO.  
L-10

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REVISIONS			
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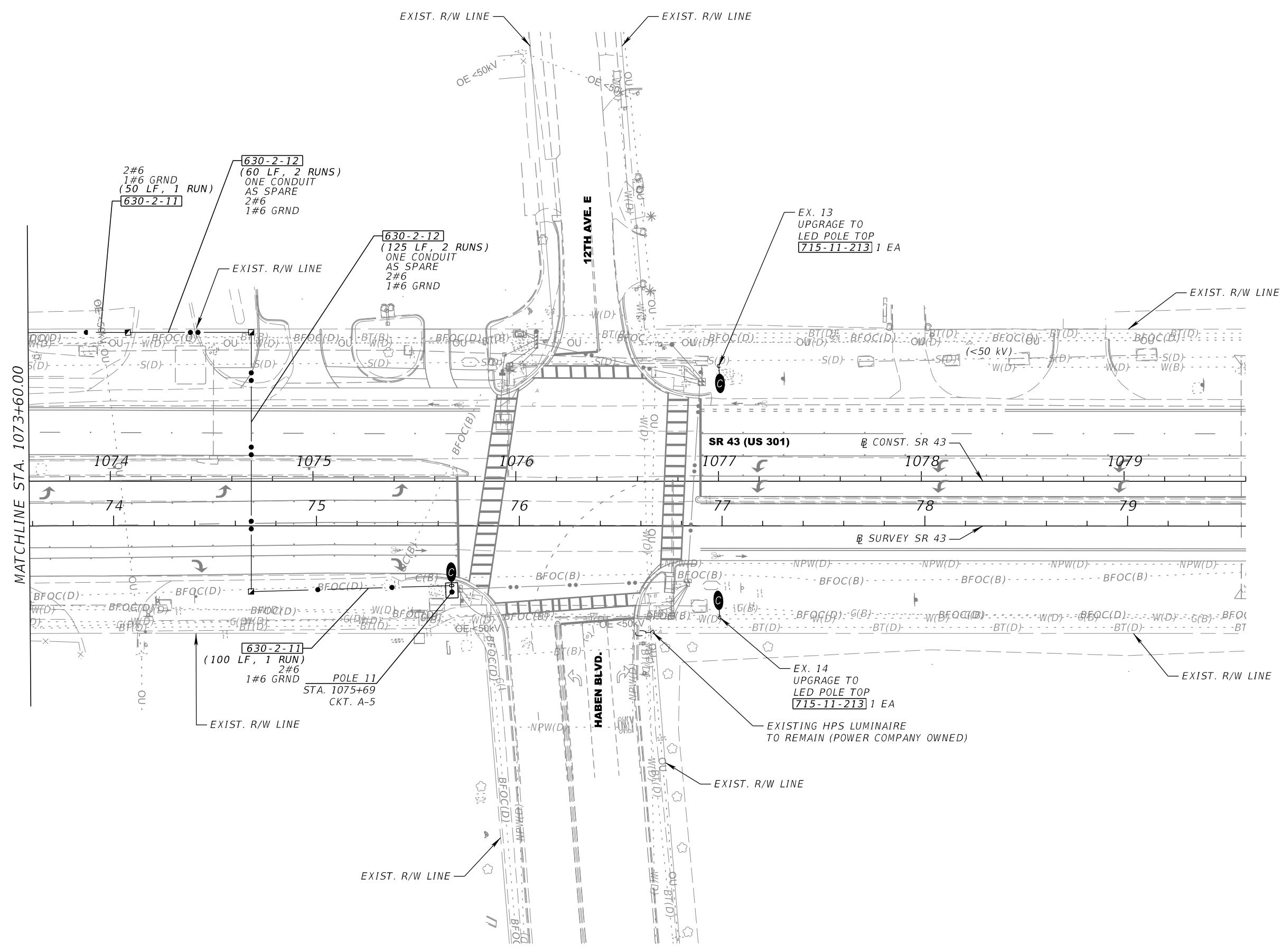
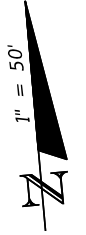
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 43	MANATEE	438062-1-52-01

**LIGHTING PLAN (6)**

SHEET NO.  
**L-11**

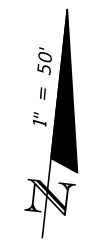
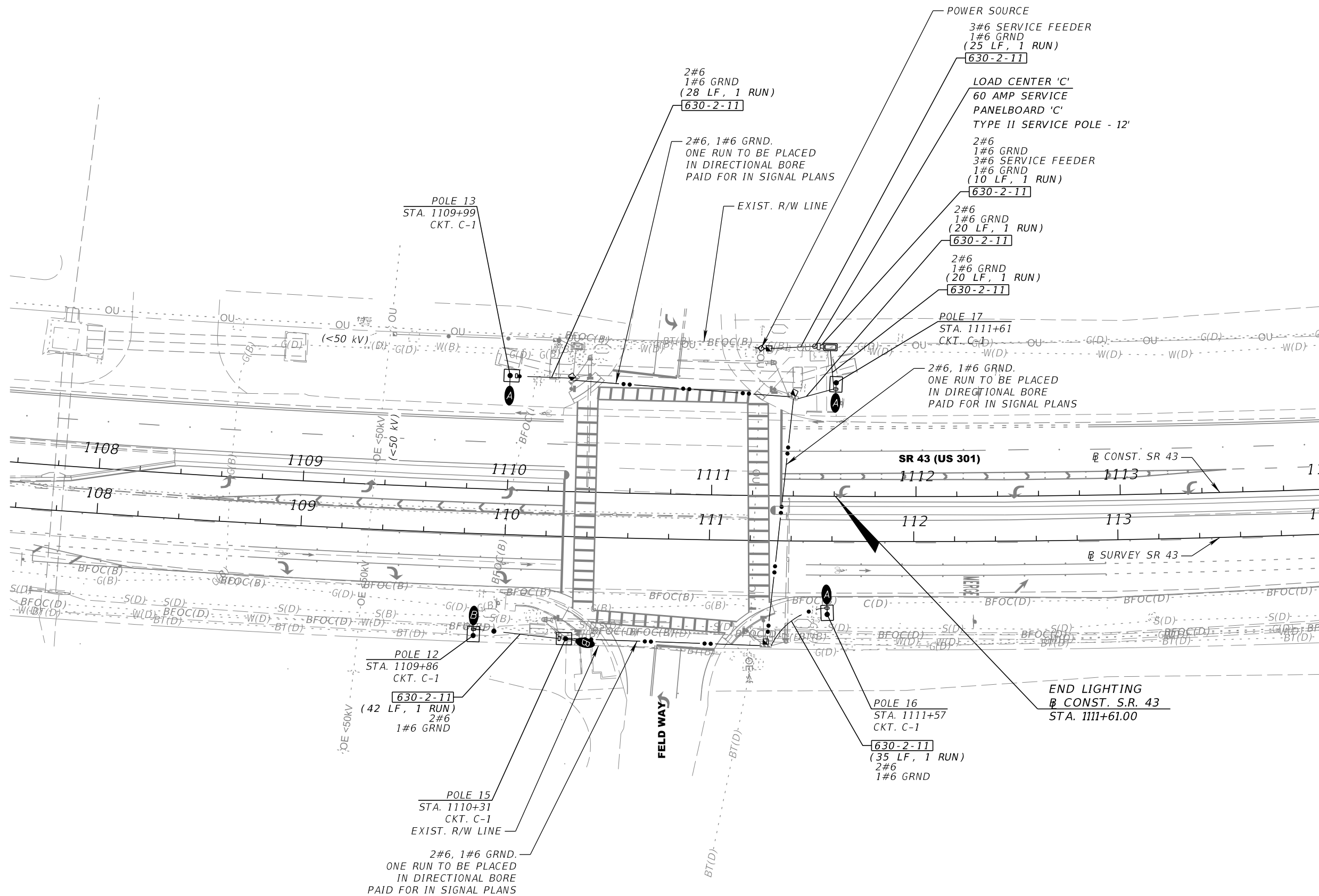
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MATCHLINE STA. 1073+60.00

REVISIONS				FALLER, DAVIS & ASSOCIATES, INC. 4200 W. CYPRESS ST. SUITE 500 TAMPA, FLORIDA 33607-1707 CERTIFICATE OF AUTHORIZATION NO. 5864 PATRICIA T. CHRISTIE, P.E. NO.: 60049	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<b>LIGHTING PLAN (7)</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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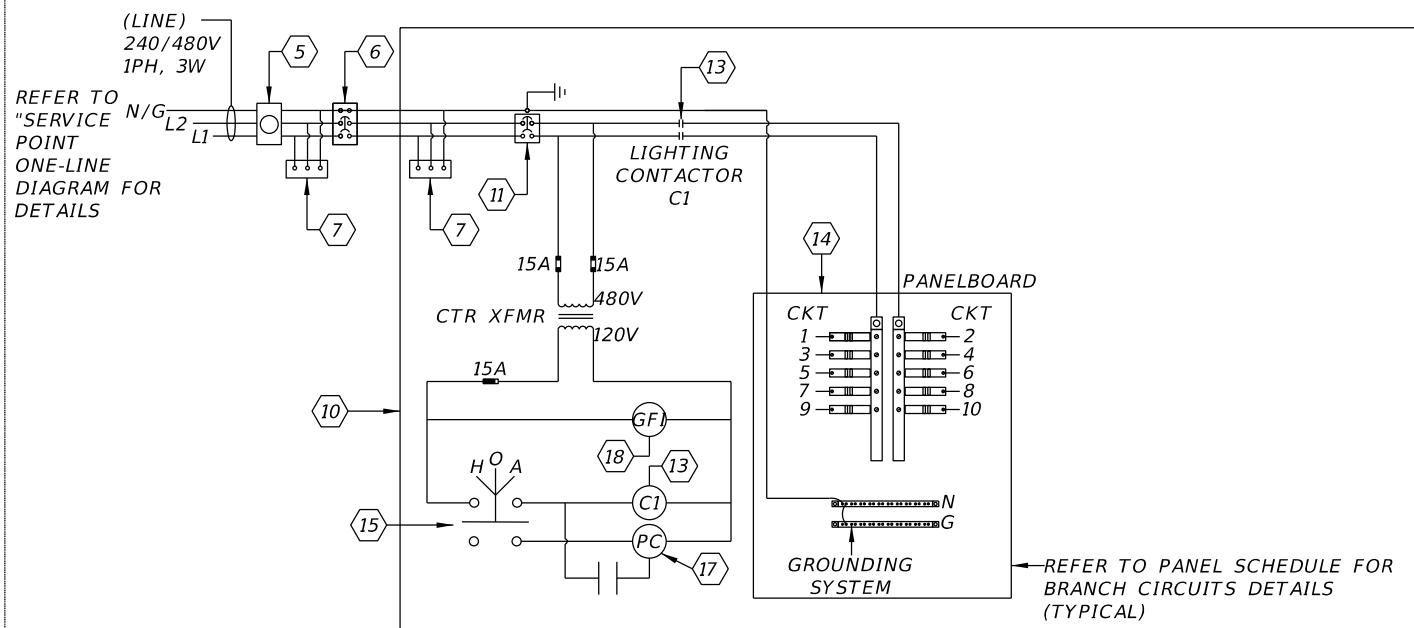
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 PATRICIA T. CHRISTIE, P.E. NO.: 60049

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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**LIGHTING PLAN (8)**

SHEET NO.  
L-13

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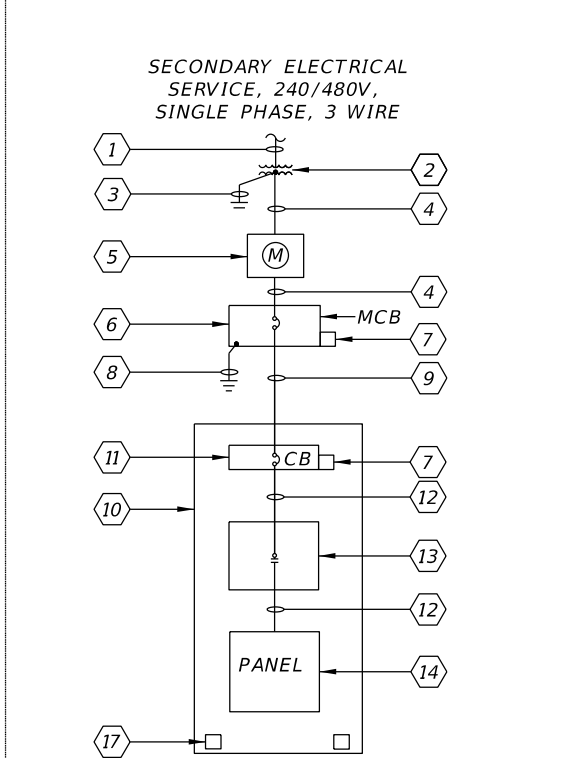


**SERVICE POINT SCHEMATIC WIRING  
DIAGRAM FOR NEW LOAD CENTER "C"**

NOT TO SCALE

**NOTES:**

1. PROVIDE MINIMUM 36" WIDE FRONT WORKING SPACE FOR THE MAIN SERVICE DISCONNECT AND THE LCP PER THE NATIONAL ELECTRICAL CODE.
2. PROVIDE MINIMUM #12 AWG INSULATED CONDUCTORS FOR ALL WIRING EXCEPT FOR THE FEEDER AND BRANCH CIRCUITS FOR ROADWAY LIGHTING.
3. PROVIDE MINIMUM #6 AWG INSULATED EQUIPMENT GROUNDING CONDUCTOR FOR THE RECEPTACLE AND CONTROL TRANSFORMER.

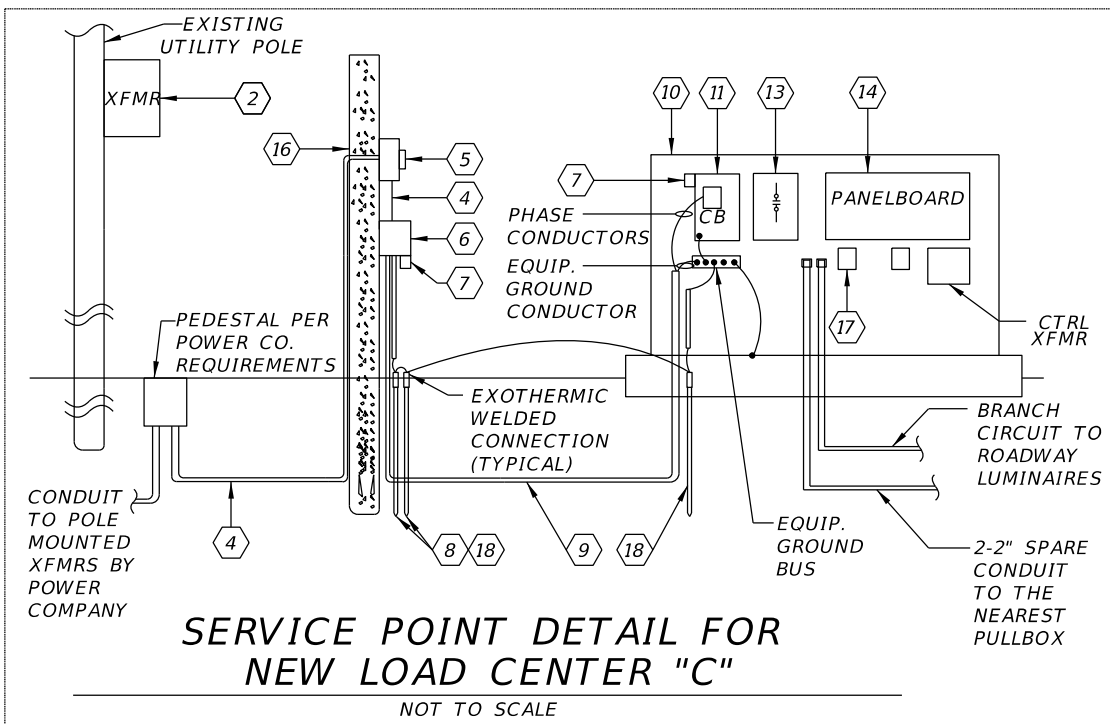


**SERVICE POINT ONE-LINE  
DIAGRAM FOR NEW LOAD  
CENTER "C"**

NOT TO SCALE

**GENERAL NOTES:**

- 1 PRIMARY ELECTRICAL DISTRIBUTION SYSTEM.
- 2 UTILITY POLE MOUNTED TRANSFORMER.
- 3 UTILITY POLE MOUNTED TRANSFORMER GROUNDING SYSTEM.
- 4 SECONDARY SERVICE ENTRANCE CONDUCTORS AND CONDUIT. REFER TO "ELECTRICAL SCHEDULE" FOR DETAILS.
- 5 KWH METER.
- 6 MAIN SERVICE DISCONNECT. REFER TO "ELECTRICAL SCHEDULE" FOR DETAILS.
- 7 SURGE PROTECTIVE DEVICE, 240/480V, 1 PHASE.
- 8 SERVICE GROUNDING ELECTRODE SYSTEM.
- 9 FEEDER CONDUCTORS AND CONDUIT. REFER TO "ELECTRICAL SCHEDULE" FOR DETAILS.
- 10 LIGHTING CONTROL PANEL (LCP)
- 11 CIRCUIT BREAKER, 35KAIC RATED.
- 12 FEEDER CONDUCTORS. REFER TO "ELECTRICAL SCHEDULE" FOR DETAILS.
- 13 ELECTRICALLY HELD LIGHTING CONTACTOR.
- 14 ELECTRICAL PANEL. REFER TO PANEL SCHEDULE FOR DETAILS.
- 15 HOA SELECTOR SWITCH IS AN INTEGRAL PART OF THE LIGHTING CONTACTOR.
- 16 12' PEDESTAL POLE PER STANDARD PLANS.
- 17 PHOTOELECTRIC CONTROLLER MOUNTED INSIDE THE LCP, REFER TO FY 2018-2019 FDOT INDEX FOR ADDITIONAL REQUIREMENTS.
- 18 5/8" DIA. X 40'L COPPER GROUND ROD. PROVIDE #6 AWG IN 1/2" C. BONDED TO SERVICE GROUNDING ELECTRODE SYSTEM.



**SERVICE POINT DETAIL FOR  
NEW LOAD CENTER "C"**

NOT TO SCALE

**ELECTRICAL SCHEDULE**

LOAD CENTER (SERVICE POINT)	SECONDARY SERVICE ENTRANCE CONDUCTORS & CONDUIT	MAIN SERVICE DISC W/CKT BREAKER TYPE (A)	SERVICE GROUNDING ELECTRODE SYSTEM	FEEDER CONDUCTORS AND CONDUIT	LCP CB (A)	FEEDER CONDUCTORS (INSIDE LCP)	LIGHTING CONTACTOR (AMP)
C	3#6 IN 1 1/4" C. & 1 1/4" SPARE C.	60	1#6 AWG IN 1/2" C.	3#6 & 1#6 GND IN 1 1/4" C.	60	3#6 & 1#6 GND	100

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

KNK ENGINEERING CONSULTING CORP. 7380 WEST SAND LAKE ROAD, SUITE 500 ORLANDO, FLORIDA 32819 CERTIFICATE OF AUTHORIZATION #28506 KATHY WONG GIANG, PE #53246			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID			
SR 43	MANATEE	438062-1-52-01			

<b>SERVICE CENTER DETAILS</b> <b>LOAD CENTER</b>		SHEET NO. <b>L-14</b>
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## SERVICE POINT GENERAL NOTES:

1. PRIMARY ELECTRICAL DISTRIBUTION SYSTEM (OVERHEAD) TO BE PROVIDED BY THE POWER COMPANY. SECONDARY SERVICE ENTRANCE IS FED FROM UNDERGROUND BETWEEN THE POLE MOUNTED TRANSFORMER(S) AND THE KWH METER.
2. UTILITY POLE MOUNTED TRANSFORMER TO BE PROVIDED BY THE POWER COMPANY, KVA RATING TO BE DETERMINED BY THE POWER COMPANY. SECONDARY VOLTAGE AND AVAILABLE FAULT CURRENT AT SECONDARY SIDE OF TRANSFORMER SHALL BE AS INDICATED. COORDINATE WITH THE POWER COMPANY IN ADVANCE TO PREVENT DELAY IN THE CONSTRUCTION OF THE UTILITY POLE MOUNTED TRANSFORMER AND PRIMARY DISTRIBUTION SYSTEM AS REQUIRED.
3. UTILITY POLE MOUNTED TRANSFORMER GROUNDING SYSTEM WILL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE POWER COMPANY.
4. SECONDARY SERVICE ENTRANCE CONDUCTORS AND CONDUIT, FROM THE METER TO THE PEDESTAL AT THE BASE OF THE UTILITY POLE SHALL BE INSTALLED UNDERGROUND. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PROVIDE SUFFICIENT SLACK SECONDARY CONDUCTORS FOR POWER COMPANY FINAL TERMINATIONS AT HANDHOLE.
5. KWH METERS WILL BE PROVIDED BY THE POWER COMPANY. METER SOCKET AND CABINET SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE POWER COMPANY REQUIREMENTS. METER SHALL BE LOCATED NO MORE THAN 50'-0" FROM THE UTILITY POLE MOUNTED TRANSFORMERS.
6. MAIN SERVICE DISCONNECTS SHALL BE ENCLOSED MOLDED CASE THERMOMAGNETIC CIRCUIT BREAKER, AMPERAGE RATING AS INDICATED IN THE "ELECTRICAL SCHEDULE", 240/480VAC, 1 PHASE,, UL LISTED FOR SERVICE ENTRANCE, NEMA 3R, POLE MOUNTED. BOND NEUTRAL TO GROUND. PROVIDE WEATHERPROOF LAMINATED LABEL WITH THE WORD "MAIN".
7. SURGE PROTECTIVE DEVICES (SPD), 240/480V, 1 PHASE, OUTDOOR RATED.
8. SERVICE GROUNDING ELECTRODE SYSTEMS SHALL BE INSULATED COPPER CONDUCTOR WITH WIRE SIZE AS INDICATED IN THE "ELECTRICAL SCHEDULE". BOND CONDUCTOR TO COPPER CLAD GROUND RODS. PROVIDE ADDITIONAL GROUND RODS IF RESISTANCE TO GROUND EXCEED 25 OHMS.
9. FEEDER CONDUCTORS AND CONDUITS SHALL BE INSTALLED UNDERGROUND. SIZE AS INDICATED IN THE "ELECTRICAL SCHEDULE".
10. LIGHTING CONTROL PANEL (LCP) SHALL BE NEMA 3R. DOOR SHALL BE LOCKABLE AND FOUR KEYS PROVIDED TO THE MAINTAINING AGENCY. DOOR SHALL HAVE CONTINUOUS HINGES AND BE LATCHABLE (NO SCREWS SHALL BE USED TO ATTACH DOOR). ENCLOSURE SHALL BE SIZED TO ENCLOSE ALL OF THE ELECTRICAL EQUIPMENT AND COMPONENTS FOR A COMPLETE AND OPERATIONAL INSTALLATION. THE LCP SHALL BE FACTORY ASSEMBLED AND TESTED PRIOR TO SHIPMENT TO THE PROJECT SITE. THE LCP SHALL BE CERTIFIED BY UL.
11. PANELBOARD, AMPERAGE, AND VOLTAGE INDICATED IN THE "ELECTRICAL SCHEDULE". PROVIDE COPPER BUS BARS, SEPARATE NEUTRAL AND EQUIPMENT GROUNDING BARS, BOLT-ON TYPE BREAKERS. SERIES RATED PANELBOARDS ARE NOT ACCEPTABLE. EACH CIRCUIT BREAKER SHALL HAVE THE MINIMUM AIC RATING AS INDICATED ON THE "PANELBOARD SCHEDULE".
12. REFER TO LIGHTING PLANS FOR APPROXIMATE LOCATION OF UTILITY POLE MOUNTED TRANSFORMER.
13. ALL NEUTRAL WIRES SHALL HAVE WHITE INSULATION. DO NOT USE WHITE OR GREEN INSULATED WIRES FOR UNGROUNDED (PHASE) CONDUCTORS.
14. A PULL BOX IS REQUIRED AT EACH LIGHTING CONTROL PANEL AND CONCRETE RISER POLE LOCATIONS. REFER TO GOVERNING STANDARD PLANS FOR ADDITIONAL REQUIREMENTS. THE PULL BOX COVER FOR THE CONCRETE PEDESTAL SHALL BE LABELED "ELECTRIC". PULL BOX COVERS SHALL MATCH OTHER COVERS FOR ROADWAY LIGHTING.
15. ALL ELECTRICAL EQUIPMENT SHALL BE PROVIDED WITH 75 DEGREE C TERMINAL LUG CONNECTORS.
16. ALL UNDERGROUND CONDUITS SHALL BE PVC. ALL CONDUITS EXPOSED TO THE WEATHER SHALL BE RIGID GALVANIZED STEEL INCLUDING ELBOWS. PROVIDE PVC TO RGS CONDUIT COUPLINGS AS REQUIRED FOR TRANSITIONS FROM UNDERGROUND TO EXPOSED INSTALLATIONS.

UTILITY POINT OF CONTACT:  
 FLORIDA POWER & LIGHTING  
 GREG COKER  
 SENIOR ENGINEER  
 (941) 723-4430  
 GREG.COKER@FPL.COM

AVAILABLE FAULT CURRENT AT  
 SECONDARY SIDE OF UTILITY POLE  
 MOUNTED TRANSFORMER IS AS  
 FOLLOWS: 6,089 AMPS

REVISIONS				KNK ENGINEERING CONSULTING CORP. 7380 WEST SAND LAKE ROAD, SUITE 500 ORLANDO, FLORIDA 32819 CERTIFICATE OF AUTHORIZATION #28506 KATHY WONG GIANG, PE #53246	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SERVICE POINT GENERAL NOTES	SHEET NO.  L-15
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 43	MANATEE	438062-1-52-01		

MAINS: 50A MCB  
VOLTAGE: 240/480V  
PHASE: 1 WIRE: 3

**EXISTING PANELBOARD "A"**  
(PANELBOARD SCHEDULE)

POLES: 16  
ENCLOSURE: NEMA 3R  
AIC RATING: 10KAIC

CIRCUIT NUMBER	DESCRIPTION	CIRCUIT BREAKER		KVA	KVA	CIRCUIT BREAKER		DESCRIPTION	CIRCUIT NUMBER
		AMPS	POLE			AMPS	POLE		
1	EXISTING LTG LOADS	15	2	1.600	2.798	15	2	EXISTING LTG LOADS	2
3	EXISTING LTG LOADS	15	2	1.600	2.800	15	2	EXISTING LTG LOADS	4
5	SEE NOTE BELOW *	20	2	1.563	-	-	2	SPACE	6
7	SPACE	-	2	-	-	-	2	SPACE	8

TOTAL CONNECTED LOAD: 10.362 KVA TOTAL DEMAND LOAD: SEE ELEC LOAD CALC  
ALL BREAKERS ARE EXISTING UNLESS OTHERWISE NOTED.  
\* NEW BRANCH CIRCUIT

MAINS: 100A MCB  
VOLTAGE: 240/480V  
PHASE: 1 WIRE: 3

**EXISTING PANELBOARD "B"**  
(PANELBOARD SCHEDULE)

POLES: 16  
ENCLOSURE: NEMA 3R  
AIC RATING: 10KAIC

CIRCUIT NUMBER	DESCRIPTION	CIRCUIT BREAKER		KVA	KVA	CIRCUIT BREAKER		DESCRIPTION	CIRCUIT NUMBER
		AMPS	POLE			AMPS	POLE		
1	EXISTING LTG LOADS	20	2	2.400	1.440	10	2	EXISTING LTG LOADS	2
3	EXISTING LTG LOADS	20	2	2.000	4.320	20	2	EXISTING LTG LOADS	4
5	EXISTING LTG LOADS	20	2	4.800	1.483	20	2	SEE NOTE BELOW *	6
7	SPACE	-	2	-	-	-	2	SPACE	8

TOTAL CONNECTED LOAD: 16.443 KVA TOTAL DEMAND LOAD: SEE ELEC LOAD CALC  
ALL BREAKERS ARE EXISTING UNLESS OTHERWISE NOTED.  
\* NEW BRANCH CIRCUIT

MAINS: 60A MCB  
VOLTAGE: 240/480V  
PHASE: 1 WIRE: 3

**NEW PANELBOARD "C"**  
(PANELBOARD SCHEDULE)

POLES: 16  
ENCLOSURE: NEMA 3R  
AIC RATING: 35K

CIRCUIT NUMBER	DESCRIPTION	CIRCUIT BREAKER		KVA	KVA	CIRCUIT BREAKER		DESCRIPTION	CIRCUIT NUMBER
		AMPS	POLE			AMPS	POLE		
1	SEE NOTE 1 *	20	2	1.480	-	20	2	SPARE	2
3	SPARE	20	2	-	-	20	2	SPARE	4
5	SPACE	-	2	-	-	-	2	SPACE	6
7	SPACE	-	2	-	-	-	2	SPACE	8

TOTAL CONNECTED LOAD: 1.480 KVA TOTAL DEMAND LOAD: SEE ELEC LOAD CALC

- NOTES FOR ALL PANELBOARDS:**
1. PROVIDE TYPE WRITTEN DIRECTORIES WITH THE SAME POLE IDENTIFICATION TAG NUMBERING SYSTEM AS INSTALLED IN THE FIELD FOR EACH POLE.
  2. ALL SPARE BREAKERS SHALL BE IN THE "OFF" POSITION.
  3. THERE SHALL BE NO SPLICES INSIDE PANELBOARDS.
  4. PROVIDE BOLT-ON TYPE BREAKERS AND COPPER BUS BARS (SEPARATE NEUTRAL & EQUIPMENT BARS)
  5. MULTI-POLE BREAKERS SHALL HAVE A SINGLE HANDLE ON THE CENTER. TWO SINGLE POLE BREAKERS TIED TOGETHER SHALL NOT BE USED.

**ELECTRICAL LOAD CALCULATIONS**  
EXISTING PANEL BOARD "A"

DESCRIPTION	CONNECTED (KVA)	DEMAND FACTOR *	DEMAND (KVA)
CIRCUIT A-1	1.600	125%	2.000
CIRCUIT A-2	2.798	125%	3.498
CIRCUIT A-3	1.600	125%	2.000
CIRCUIT A-4	2.800	125%	3.500
CIRCUIT A-5	1.563	125%	1.954
TOTAL	10.362		12.952

OVERCURRENT PROTECTION:  
 $\frac{12,952 \text{ VA}}{480 \text{ V}} = 26.98 \text{ A} * 125\% \text{ (25\% FUTURE LOADS)} = 33.73 \text{ AMPS}$   
THEREFORE, EXISTING 50 AMP SINGLE PHASE ELECTRICAL SERVICE IS SUFFICIENT TO SERVE ALL LOADS.

**ELECTRICAL LOAD CALCULATIONS**  
EXISTING PANEL BOARD "B"

DESCRIPTION	CONNECTED (KVA)	DEMAND FACTOR *	DEMAND (KVA)
CIRCUIT B-1	2.400	125%	3.000
CIRCUIT B-2	1.440	125%	1.800
CIRCUIT B-3	2.000	125%	2.500
CIRCUIT B-4	4.320	125%	5.400
CIRCUIT B-5	4.800	125%	6.000
CIRCUIT B-6	1.483	125%	1.854
TOTAL	16.443		20.554

OVERCURRENT PROTECTION:  
 $\frac{20,554 \text{ VA}}{480 \text{ V}} = 42.82 \text{ A} * 125\% \text{ (25\% FUTURE LOADS)} = 53.53 \text{ AMPS}$   
THEREFORE, EXISTING 100 AMP SINGLE PHASE ELECTRICAL SERVICE IS SUFFICIENT TO SERVE ALL LOADS.

**ELECTRICAL LOAD CALCULATIONS**  
NEW PANEL BOARD "C"

DESCRIPTION	CONNECTED (KVA)	DEMAND FACTOR *	DEMAND (KVA)
CIRCUIT C-1	1.480	125%	1.850
TOTAL	1.480		1.850

OVERCURRENT PROTECTION:  
 $\frac{1,850 \text{ VA}}{480 \text{ V}} = 3.85 \text{ A} * 125\% \text{ (25\% FUTURE LOADS)} = 4.82 \text{ AMPS}$   
THEREFORE, PROVIDE 60 AMP SINGLE PHASE ELECTRICAL SERVICE TO SERVE ALL LOADS.

- NOTES FOR ALL LOAD CALCULATIONS:**
- \* UTILIZED 125% DEMAND FACTOR FOR CONTINUOUS LOADS (LIGHTING) PER THE NATIONAL ELECTRICAL CODE.

REVISIONS				KNK ENGINEERING CONSULTING CORP. 7380 WEST SAND LAKE ROAD, SUITE 500 ORLANDO, FLORIDA 32819 CERTIFICATE OF AUTHORIZATION #28506 KATHY WONG GIANG, PE #53246	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			LOAD CENTER SCHEDULES	SHEET NO.  L-16
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 43	MANATEE	438062-1-52-01		

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**GENERAL NOTES**

**DESIGN METHODS**

LOAD RESISTANCE FACTOR DESIGN.

**CONCRETE**

CLASS	MINIMUM 28-DAY COMPRESSIVE STRENGTH	LOCATION
IV	f'c = 5500 PSI	LUMINAIRE SPREAD FOOTING

**REINFORCING STEEL**

REINFORCEMENT CAN BE EITHER DEFORMED BAR REINFORCEMENT OR WELDED WIRE FABRIC. BAR REINFORCEMENT SHALL BE ASTM A615, GRADE 60. DEFORMED WELDED WIRE FABRIC SHALL HAVE A DESIGN STRENGTH OF 65 KSI.

**CONCRETE COVER**

CONCRETE COVER SHOWN IN THE PLANS DOES NOT INCLUDE REINFORCEMENT PLACEMENT AND FABRICATION TOLERANCE UNLESS SHOWN AS "MINIMUM COVER". SEE FDOT STANDARD SPECIFICATIONS FOR ALLOWABLE REINFORCEMENT PLACEMENT TOLERANCES.

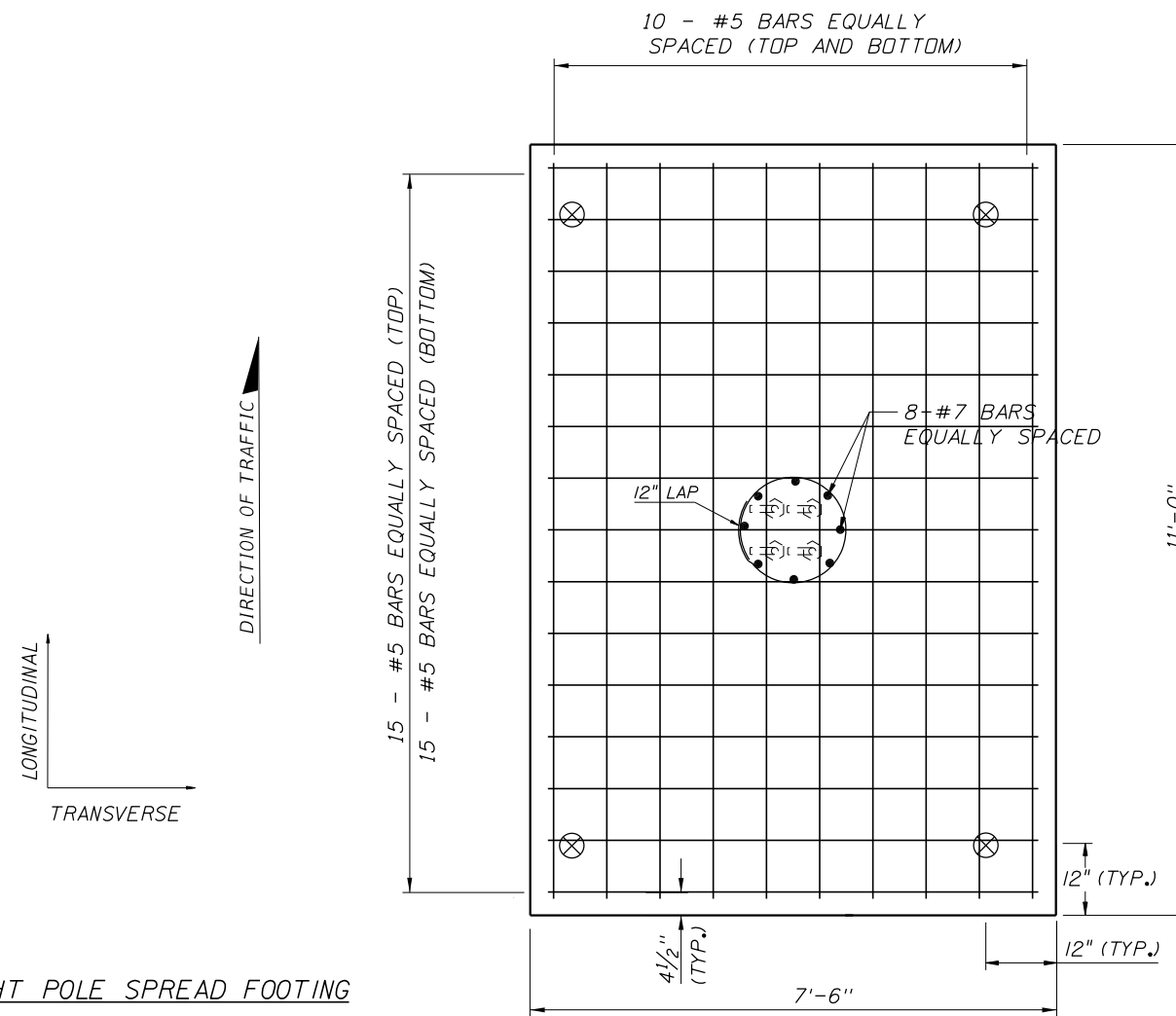
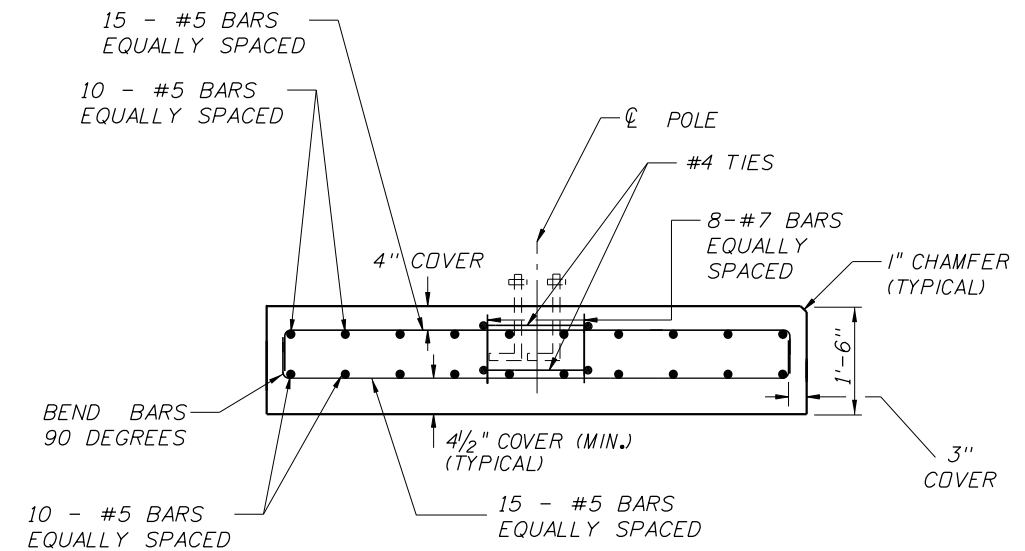
**LUMINAIRE SPREAD FOOTING NOTES**

1. THE COST OF THE FOOTING IS INCLUDED IN THE PAY ITEM NUMBER 0715-4-23 FOR LIGHT POLE COMPLETE (LUMINAIRE, POLE, FOUNDATION) EA.
2. SOIL BELOW FOOTING TO HAVE A MINIMUM BEARING CAPACITY OF 2.0 kip/sq ft.
3. ANCHOR BOLTS ARE TO HAVE A MINIMUM OF 4 1/2 INCH CONCRETE COVER AT THE BOTTOM OF THE FOOTING.
4. PROVIDE ANCHOR BOLTS THAT EFFECTIVELY TRANSMIT THE LIGHT POLE LOAD TO THE SHAFT AND THAT FIT THE REINFORCING CAGE. VERIFY THAT THE FORCES OF THE LIGHT POLE DO NOT EXCEED THE DESIGN LOADS OF THIS FOOTER. CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL SHOWING THAT THESE REQUIREMENTS HAVE BEEN MET PRIOR TO CONSTRUCTION.
5. THE PULL BOX WILL BE INSTALLED ADJACENT TO AND NOT WITHIN THE LIMITS OF THE FOOTING, THEREFORE ALLOWING ADEQUATE DRAINAGE OF THE PULL BOX.
6. DESIGN LOADS NOT TO EXCEED:
 

MOMENT IN TRANSVERSE DIR. = 23.803 KIP * FT	MOMENT IN LONGITUDINAL DIR. = 23.803 KIP * FT
TORSION = 1.24 KIP * FT	
AXIAL = 0.548 KIP	
SHEAR IN TRANSVERSE DIR. = 0.985 KIP	SHEAR IN LONGITUDINAL DIR. = 0.985 KIP
7. ALL CONDUIT SHOULD BE RIGID GALVANIZED STEEL OR SCHEDULE 40 PVC. BENDS IN CONDUIT SHALL BE MADE USING A RADIUS NOT LESS THAN 11 IN. LOCATION OF THE CONDUIT SHALL BE VERIFIED PRIOR TO CONSTRUCTION (CONDUIT NOT SHOWN FOR CLARITY).
8. SPREAD FOOTING MAY BE CAST IN PLACE OR PRECAST. FOR PRECAST OPTION, SHOP DRAWINGS SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS WHERE THE PRECAST FOOTING CAN BE USED.

**PRECAST OPTION FOOTING NOTES**

1. SURFACE FINISH: THE EXPOSED PART OF THE PEDESTAL SHALL HAVE A CLASS 3 FINISH.
2. HANDLING: PRECAST CONCRETE FOOTINGS MUST BE MAINTAINED IN A FLAT POSITION. THEY MUST BE PICKED UP FROM TWO (2) POINTS LOCATED AT EACH END.
3. STORAGE AND TRANSPORTATION: ALL PRECAST CONCRETE FOOTINGS MUST BE STORED ON ADEQUATE DUNNAGE. THE PRECAST CONCRETE FOOTING MUST BE SUPPORTED NO CLOSER THAN 6 INCHES AND NO FURTHER THAN 18 INCHES FROM THE END.
4. MARKING: EACH PRECAST CONCRETE FOOTING SHALL BE MARKED SHOWING CASTING DATE, AND IDENTIFICATION LETTERS AND NUMBERS.
5. WHEN WELDED WIRE FABRIC IS USED, THE AREA MUST BE AT LEAST EQUAL TO THE AREA OF THE REINFORCEMENT SHOWN IN THE DRAWING.



**LIGHT POLE SPREAD FOOTING**

CONCRETE = 4.58 CY  
REINFORCING = 688 LBS

⊗ DENOTES PICK UP POINTS FOR PRECAST FOOTING OPTION.

REVISIONS						<b>STRUCTURES DESIGN OFFICE</b> DISTRICT 1 801 N. Broadway Bartow, Florida 33830-3809 Andra Diggs II, P.E., No. 63815	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET TITLE: LIGHT POLE SPREAD FOOTING		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:	SHEET NO.	
							SR 43	MANATEE	438062-1-52-01	SR 43 (US 301)	L-17	

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.